

AMENDED CLAIM

1. (Twice amended) A production method of a titanium-made
5 plate-type heat exchanger comprising flow paths of a first fluid and flow
paths of a second fluid alternately arranged such that heat can be exchanged
between the two fluids, said production method for forming said flow paths
by connecting a titanium-made flat container having an inlet of one of the
fluids formed on one end and an outlet of the fluid formed on the other end to
10 an offset-type titanium plate fin accommodated in said flat container and
connected to the inner side of said container via top ends of concave strips of
said titanium plate fin so as to form a plane to plane connection, comprising
steps of:

coating a brazing paste over positions to be connected of said
15 constituting members by using a paste supply machine, wherein said brazing
paste is prepared by atomizing an alloy comprising a Ti-Zr type brazing
solder, which melts under 880°C, containing 20 to 40 wt.% of titanium and 20
to 40 wt.% of zirconium so as to obtain a powdered alloy, which is mixed with
a neutral binder so that said paste is prepared; and

20 heating said brazing solder coated constituting members under 880°C
in an vacuum and/or inert gas atmosphere.

2. (Deleted).